2018-2020 KENTUCKY BRANCH BUDGET Baseline Budget Request: Program Narrative/Documentation Record

OPERATING BUDGET REPORT A-4

Agency: Environmental Education Council Appropriation Unit: Environmental Education Council

Program/Service Unit: Sub Program:

Governmental Branch: Executive Cabinet/Function: Education and Workforce Development

Posting Unit:

				<u>Baseline</u>	
I. PROGRAM/RESULTS	Actual	Actual	Budgeted	Requested	Requested
DOCUMENTATION	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20
(a) Total Funding	167,207	186,127	<mark>261,100</mark>	<mark>314,902</mark>	299,033
(b) Quantitative Data					
New Certified Professional Environmental Educators	0	26	0	20	20
Renewing CPEEs	78	78	90	80	90
Kentuckians served by CPEEs	140,724	161,843	200,000	200,000	200,000
KY Green and Healthy Schools receiving awards	9	9	30	25	25
Number of attendees at KGHS Youth Summit and Awards	215	194	300	250	250

II. PROGRAM DESCRIPTION/PURPOSE

Mission

The mission of the Kentucky Environmental Education Council (KEEC) is to undertake a comprehensive environmental education initiative to promote an informed and knowledgeable citizenry with the skills and attributes necessary to effectively and constructively solve existing environmental problems, prevent new ones, and maintain a balanced and economically healthy environment for future generations (KRS 157.900).

What is environmental education?

Environmental education does not involve advocating for a particular position on an issue. It includes a number of broad ideas, including: using the environment as a theme for integrating learning across subject areas, such as math, language arts, science, social studies, physical education, and technology; going outside to learn in applied settings like school gardens, outdoor classrooms, and local streams; and saving school districts money – that can be reinvested in education – by increasing the energy efficiency and environmental sustainability of school buildings. Environmental education goes beyond formal pre-kindergarten through university settings to include experiences for all ages, in a variety of settings, which facilitate personal connections to Kentucky's natural heritage and responsible actions to sustain it.

Programs

KEEC facilitates environmental education across the Commonwealth through:

- The Professional Environmental Educator Certification course, in which educators learn national guidelines for teaching about the environment, including allowing students to decide for themselves where they stand on environmental issues;
- The Kentucky Green and Healthy Schools program, in which students complete projects to improve the health, safety and environmental sustainability of their schools;
- Land, Legacy and Learning, a five-year master plan for environmental education in Kentucky, and accompanying survey of Kentuckians' environmental knowledge, attitudes, and behaviors;
- The Kentucky Environmental Literacy Plan, which provides guidelines to school districts on how to ensure that high school graduates have a basic understanding of environmental systems and how human and environmental systems are connected;
- The Environmental Education Leadership Corps, a proposed AmeriCorps program to place Certified Professional Environmental Educators in organizations throughout Kentucky;
- Other programs, workshops, conference sessions and committees that strengthen environmental education in Kentucky and encourage Kentuckians to go outside to improve their health and their connection to the Commonwealth.

Statutory functions

KRS 157.915 says that KEEC shall accomplish the following functions:

- (1) Create and update annually a management plan to coordinate all state environmental education programs;
- (2) Establish an Interagency Subcommittee on Environmental Education to advise the Council and coordinate environmental education in state government:
- (3) Establish and help coordinate the activities of regional environmental education centers at the state universities and the central office of the Kentucky Community and Technical College System to serve as networks for the dissemination of environmental education programs, materials, and information across the state;
- (4) Establish a competitive system for awarding grants for the establishment and maintenance of regional environmental education centers; seek private support to fund state and regional initiatives;
- (5) Seek and receive private support to fund state and regional environmental education initiatives;
- (6) Assist in the integration and evaluation of environmental education in the school curricula;

- (7) Monitor and report periodically on environmental literacy in Kentucky and continually assess trends and needs in environmental education on a local, state, national, and global basis; and
- (8) Make recommendations and seek changes through regulations, legislation and other means to promote environmental literacy in Kentucky.

III. PROGRAM RESULTS/FISCAL JUSTIFICATION

KEEC has leveraged its baseline funding of \$150,000 to establish and maintain a statewide reach, serving thousands of students and educators annually. In Fiscal Year 2018, KEEC projects \$125,000 in revenue from federal grants, private grants, and course fees, which increase the agency's capacity to deliver programs.

KRS 157.915 (1): Create and update annually a management plan to coordinate all state environmental education programs

Land, Legacy and Learning IV

In 2015, KEEC published *Land, Legacy and Learning IV*, the most recent five-year plan for environmental education in Kentucky. KEEC worked closely with partners in the field of environmental education to ensure the plan addresses the interest and needs of the public, as well as new trends in the field of environmental education, while continuing to support the strong foundation of the field in Kentucky. Over 175 Kentuckians participated in 13 regional meetings designed to gather public input for the 2015-2020 environmental education master plan. The plan is available on the agency website at keec.ky.gov/publications.

Professional Environmental Educator Certification

A key piece of the plan continues to be the Professional Environmental Educator Certification course. The course helps to ensure that environmental educators at state agencies, schools, universities, nonprofit organizations and other educational institutions are teaching about the environment according to state and national guidelines, and maintaining a separation between environmental education and environmental advocacy. In the 2016-18 biennium, 26 educators completed the course, for a total of 212 graduates since the course began in 2004. In 2015, KEEC received accreditation of the Professional Environmental Educator Certification program from the North American Association for Environmental Education, becoming one of only three accredited programs in the nation.

KEEC also delivers an annual continuing education course via webinar and professional development and networking meeting for Certified Professional Environmental Educators. Participation in the course, along with other continuing education, is required annually to maintain certification. In 2016, Certified Professional Environmental Educators reported reaching over 160,000 people in Kentucky with high-quality environmental education programs.

KRS 157.915 (2): Establish an Interagency Subcommittee on Environmental Education to advise the Council and coordinate environmental education in state government

Interagency Subcommittee on Environmental Education

Comprised of state agency representatives from multiple cabinets, the Interagency Subcommittee on Environmental Education meets quarterly, advises the Council on environmental education in state government, and assists with implementation of the Master Plan for Environmental Education in Kentucky from Land, Legacy and Learning IV.

KRS 157.915 (3): Establish and help coordinate the activities of regional environmental education centers at the state universities and the central office of the Kentucky Community and Technical College System to serve as networks for the dissemination of environmental education programs, materials, and information across the state

Centers for Environmental Education

Centers for Environmental Education are active at six state universities. These Centers offer pre-service and/or in-service teacher training, toolkit and resource libraries, student life activities, and more. Each Center for Environmental Education is unique, but five universities offer the Environmental Education Endorsement, a 12-credit graduate level teaching endorsement supported by the Education and Professional Standards Board.

KRS 157.915 (4): Establish a competitive system for awarding grants for the establishment and maintenance of regional environmental education centers; seek private support to fund state and regional initiatives

Pride Fund

KEEC has competitively funded university Centers for Environmental Education via pass-through funding provided through interest earned on a bond measure (the Pride fund). From the beginning of the century until 2015, interest on the bond measure had dwindled from over one million dollars per year to around \$1,000 per year. Then, the interest was transferred to KEEC by the biennial budget in order to cover agency pension costs. In addition to the loss of this funding, university budget cuts have also negatively impacted the capacity of the Centers for Environmental Education to service their regions. Thus, the agency is seeking additional measures through which we can continue to support the established centers for environmental education at our state universities and colleges.

KRS 157.915 (5): Seek and receive private support to fund state and regional environmental education initiatives

Grants

During the 2016-18 biennium, KEEC received grant funding from Toyota Motor Manufacturing of Kentucky, the US Environmental Protection Agency, and the Institute for Healthy Air, Water, and Soil. For the 2018-2020 biennium, KEEC will receive at least \$143,000 in grants, and will continue to seek support from new and ongoing sources.

In addition to grants, KEEC has received approximately \$35,000 of in-kind support from Council members, and local and federal government entities, along with approximately \$4000 in scholarships from state, regional, and national professional organizations.

KRS 157.915 (6): Assist in the integration and evaluation of environmental education in the school curricula

Kentucky Green and Healthy Schools (KGHS)

Since its inception in 2007, over 290 schools and thousands of students have participated in the Kentucky Green and Healthy Schools program. Schools involved in the KGHS program implement student-led, STEM-focused, project-based learning. The program introduces students to new career fields and assists in generating a career ready workforce for industry and other critical Kentucky business sectors. Students have installed energy saving devices on vending machines, put motion sensors on light fixtures, added rain barrels and bike racks, and implemented recycling programs. The hands-on, experiential nature of environmental education is shown to improve students' test scores in all subject areas, problem solving and teamwork skills, learning comprehension, and behavior in school. Schools receive awards for their projects at the annual Youth Summit and Awards Luncheon co-hosted by KGHS and the KY NEED Project.

Through a grant from the U.S. Environmental Protection Agency, KEEC will offer \$22,750 in sub-grants to schools for water education projects as part of the KGHS program in the 2017-18 school year. The grant will allow KEEC to focus on increasing participation in the underserved regions of eastern and western Kentucky.

Kentucky Environmental Literacy Plan (KELP)

KEEC continues to seek ways to implement the goals of the Kentucky Environmental Literacy Plan. The overarching goal of the plan is to ensure that high school graduates understand how human and environmental systems are connected. KEEC maintains an Implementation Advisory Team, which is now funded through a grant received by KEEC's partner the Kentucky Association for Environmental Education.

The Kentucky Environmental Literacy Plan implementation advisory team submitted alignments between the Next Generation Science Standards and the *Excellence in Environmental Education: Guidelines for Learning (K-12)* to the National Project for Excellence in Environmental Education. These alignments supported the development of a national alignment document available through the North American Association for Environmental Education.

Professional Learning Opportunities for Educators

As mentioned above, KEEC has graduated 212 formal and nonformal educators from the Professional Environmental Educator Certification course and the agency offers professional learning opportunities for and tracks the continuing education of Certified Professional Environmental Educators. Through its federal grant for water education, KEEC was able to offer four teacher professional learning workshops on water education in 2017, with a total of over 60 participants from all over Kentucky. KEEC encourages teachers to attend professional learning offered through its partners the Kentucky Association for Environmental Education and the KY NEED Project.

KRS 157.915 (7): Monitor and report periodically on environmental literacy in Kentucky and continually assess trends and needs in environmental education on a local, state, national, and global basis

The 2014 Survey of Kentuckians' Environmental Knowledge, Attitudes and Behaviors, published in *Land, Legacy, and Learning IV*, found that 96% of the public support teaching environmental education in schools. A significant percentage of Kentuckians do not connect personal actions with environmental impact, but do want to know about environmental problems. The survey found that the average Kentuckian tends to blame industry for environmental problems, failing to recognize that the biggest burden of environmental impact comes from the collective impact of individual actions. Full survey results are on the agency website, at keec.ky.gov/publications.

KEEC staff regularly participate in initiatives and conferences of the Kentucky Association for Environmental Education and the North American Association for Environmental Education. These initiatives including writing and revising national environmental education guidelines, participating in accreditation of university and nonformal environmental education certification programs, advising other state certification programs, and disseminating information about Kentucky's environmental education to an international audience. Through these efforts, Kentucky has been perceived as a leader in environmental education at the national level.

KEEC reports on environmental education resources—including training opportunities, grants, and curricula—through a quarterly email newsletter, teacher email LISTSERVs, and participation in workshops and conferences. KEEC is working with its partners to create an annual report on environmental education to better publicize resources to schools and other organizations. The annual report will start with a basic description of offerings, but KEEC plans to tie the report to a national effort to standardize state surveys and better assess the education and economic impact of environmental education.

KRS 157.915 (8): Make recommendations and seek changes through regulations, legislation and other means to promote environmental literacy in Kentucky.

KEEC continues to advocate for the inclusion of environmental education in school curricula and teacher pre-service education, but has found greater success with efforts that are voluntary rather than mandatory. Funding for schools, such as the water education grant, and awards through the Kentucky Green and Healthy Schools program encourage teachers to integrate environmental education. Through voluntary efforts, KEEC is able to provide schools resources that ensure that environmental education is interdisciplinary, focused on STEM and workforce development, and avoids advocacy.

For organizations that offer nonformal environmental education, KEEC is seeking to have much greater impact through the Environmental Education Leadership Corps. This AmeriCorps program would place at least twenty Certified Professional Environmental Educators in organizations throughout Kentucky to increase their capacity to offer quality environmental education programs to the public at minimal cost to the organization. KEEC has already received a planning grant for this program and is working closely with the Kentucky Commission on Community Volunteerism and Service and its environmental education partners to apply for federal funding and raise private support to begin in 2018.

Fiscal justification

Each year, KEEC receives baseline funding of \$150,000 in environmental fines and penalties collected by the Energy and Environment Cabinet. KEEC converts this funding into an investment in the future of Kentucky through educating its citizens to take personal responsibility for protecting the environment as a necessary basis for a healthy economy.

The \$150,000 allocated to the Council in 1994 is the equivalent of approximately \$250,000 today. As KEEC has cut permanent staff and reduced expenses to deal with the dwindling impact of this funding, it has sought to multiply the value of the funding through adding federally-funded staff and raising federal and private support for its programs. In Fiscal Year 2018, KEEC projects \$125,000 in revenue from federal grants, private grants, and course fees.

Since 2007, over 290 schools and thousands of students have been involved in student-led, STEM-focused, project-based learning through the Kentucky Green and Healthy Schools program. In 2016, educators certified through Kentucky's nationally-accredited Professional Environmental Educator Certification program reported reaching over 160,000 people in Kentucky with high-quality environmental education programs in schools, universities, parks, camps, 4-H, extension, libraries, and other organizations.

Through the Kentucky Green and Healthy Schools program, the Professional Environmental Educator Certification course, and all of its programs, KEEC promotes learning and skills for a sustainable and economically healthy environment.